

United States Environmental Protection Agency Region 10
1200 Sixth Avenue
Seattle, Washington 98101

AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, 33 U.S.C. §1251 et seq., as amended by the Water Quality Act of 1987, P.L. 100-4 (the Act or CWA),

Ketchikan Gateway Borough (the Permittee)
Department of Public Works
344 Front Street
Ketchikan, AK 99901

is authorized to discharge from the **Ketchikan Gateway Borough Ward Cove Wastewater Treatment Plant** (the facility), a wastewater treatment plant (WWTP) treating domestic wastewater, located at 7559 North Tongass Highway, northwest of Ketchikan, Alaska

to

Ward Cove (the receiving water),

<u>Outfall</u>	<u>Receiving Water</u>	<u>Latitude</u>	<u>Longitude</u>
001	Ward Cove	55° 24' 15" N	131° 43' 45" W

in accordance with effluent limitations, monitoring requirements, and other conditions set forth herein.

The permit shall become effective

This permit and the authorization to discharge shall expire at midnight,

Signed this day of

DRAFT

Randall F. Smith, Director
Office of Water, Region 10
U.S. Environmental Protection Agency

TABLE OF CONTENTS

I.	EFFLUENT LIMITATIONS	4
II.	MONITORING REQUIREMENTS	5
A.	Objectives of Monitoring Requirements	5
B.	Monitoring Requirements – Outfall 001 and Internal Outfall 001a	5
C.	Analytical Methods	6
D.	Additional Monitoring by Permittee	6
E.	Whole Effluent Chronic Toxicity Monitoring	6
F.	Representative Sampling	8
G.	Quality Assurance Plan	8
H.	Reporting of Monitoring Results	10
III.	BEST MANAGEMENT PRACTICES PLAN.....	10
A.	Purpose and Objectives.....	10
B.	Requirements	11
C.	Documentation	12
D.	Modification of the BMP Plan.	12
E.	Certification and Signatory Requirements.	12
IV.	COMPLIANCE RESPONSIBILITIES.....	12
A.	Duty to Comply	12
B.	Proper Operation and Maintenance	12
C.	Duty to Mitigate.	13
D.	Toxic Pollutants	13
E.	Need to Halt or Reduce Activity Not a Defense	13
F.	Bypass of Wastewater Treatment	13
G.	Upset	14
H.	Inspection and Entry	14

I.	Penalties for Violations of Permit Conditions	14
J.	Duty to Provide Information	16
K.	Records Content	16
L.	Submittal of Reports	16
M.	Retention of Records and Reports	16
N.	On-Site Availability of Records and Reports	17
O.	Availability of Reports for Public Review	17
P.	Planned Changes	17
Q.	Changes in the Discharge of Toxic Substances	17
R.	Anticipated Noncompliance.	18
S.	Reporting of Non-Compliance	18
T.	Permit Actions	19
U.	Duty to Reapply	19
V.	Incorrect Information and Omissions	19
W.	Signatory Requirements	19
X.	Property Rights	20
Y.	Severability	20
Z.	Transfers	20
AA.	Oil and Hazardous Substances Liability	21
BB.	State Laws	21
CC.	Reopening of the Permit	21
VII.	DEFINITIONS and ACRONYMS.	21

I. EFFLUENT LIMITATIONS

- A. During the term of the permit, the Permittee is authorized to discharge pollutants from the outfall specified herein to Ward Cove within the limits and subject to the conditions set forth herein. This permit does not authorize the discharge of any waste streams, including spills and other unintentional or non-routine discharges of pollutants, that are not part of the normal operation of the facility as disclosed in the permit application of June 12, 2003, or any pollutants that are ordinarily not present in the waste streams.
- B. This permit authorizes the discharge, in accordance with the provisions of this permit, of treated domestic wastewater originating from the offices and shop areas of the former Ketchikan Pulp Company (KPC) manufacturing site; treated wastewater originating from dewatering and wash down activities of a sludge composting facility located on the grounds of the adjacent manufacturing site; and approximately 2 million gallons per day (mgd) of water diverted from Lake Connell for the purpose of maintaining a wood stove cooling water supply line that serves the manufacturing site.
- C. The authorized discharge shall not, alone or in combination with other substances or wastes, make the receiving waters unfit or unsafe for use; cause a film, sheen, or discoloration on the surface of the waters or adjoining shorelines; cause leaching of toxic or deleterious substances; cause a sludge, solid, or emulsion to be deposited beneath or upon the surface of the water, within the water column, on the bottom, or upon adjoining shorelines.
- D. Discharges of WWTP effluent at internal outfall 001a and the combined flow of WWTP effluent with Lake Connell water through Outfall 001 shall not exceed the effluent limitations presented in Tables 1 and 2, below.

Table 1 - Effluent Limits, Outfall 001

Parameter	Monthly Avg	Weekly Avg	Daily Maximum
Minimum Flow	2.0 mgd	-	
Fecal coliform	14/100ml	-	43/100ml
Total Chlorine ₁ Residual	-	-	0.0075mg/l
Footnote:			
1. Detection limit for total Chlorine residual shall be 0.1mg/l.			

Table 2 - Effluent Limits, Outfall 001a

Parameter	Concentration Based Limits			Mass Based Limits			Removal
	Monthly Avg	Weekly Avg	Daily maximum	Monthly Avg	Weekly Avg	Daily Maximum	Monthly Avg Removal
Maximum Flow	0.025 mgd -	-		-	-		-
BOD ₅	30 mg/L	45 mg/L	60 mg/l	6.3 lbs/day	9.4 lbs/day	12.6 lbs/day	≥ 85 %
TSS	30 mg/L	45 mg/L	60 mg/l	6.3 lbs/day	9.4 lbs/day	12.6 lbs/day	≥ 85 %
Fecal Coliform	200 FC/100mL	400 FC/100mL	800 FC/100mL	-		-	-
Chlorine	0.5 mg/L	0.75 mg/L	1.0 mg/L	0.1 lbs/day	0.16 lbs/day	0.21 lbs/day	-

- E. The discharge through Outfall 001a and Outfall 001 for dissolved oxygen concentrations must be a minimum of 2.0 mg/l, and a minimum of 5.0 mg/L and a maximum of 17.0 mg/l, respectively.
- F. The discharge through Outfall 001a for pH must be minimum of 6.0 standard units (s.u.) and maximum of 9.0 s.u.
- G. Floating solids, debris, sludge, deposits, foam, scum and other residues cannot be disposed of alone or in combination with other substances in quantities that would make the water unfit or unsafe for any marine uses.
- H. Discharges of process wastewaters, originating from the adjacent manufacturing site, and storm water from the grounds of the adjacent manufacturing site through Outfall 001 are prohibited. Only those wastewaters expressly described by Section I of this permit are authorized for discharge through Outfall 001 in accordance with the provisions herein.
- I. A minimum of one warning sign must be placed on the shoreline near the outfall line. The sign(s) should state that secondary treated and disinfected domestic wastewater is being discharged and provide the name and owner of the facility and give a contact number for additional information.
- J. Sludge handling and disposal, including composting activity, shall be conducted in accordance with EPA requirements at 40 CFR 503.

II. MONITORING REQUIREMENTS

A. Objectives of Monitoring Requirements

- ☐ determine compliance with provisions of the NPDES permit
- ☐ provide further characterization of discharges from the facility

- ☐ determine treatment system performance
- ☐ assess impacts to receiving water quality
- ☐ develop data for permit reissuance

B. Monitoring Requirements – Outfall 001 and Internal Outfall 001a

The Permittee shall monitor effluent discharged through Outfall 001 and Internal Outfall 001a in accordance with the requirements of Tables 3 and 4, below.

Table 3 - Monitoring Requirements, Outfall 001¹

Parameter	Sample Location ¹	Sample Frequency	Sample Type
Avg and Max Daily Flow	001	continuous	metered
BOD ₅	001	quarterly	24-hr composite
Chronic Toxicity	001	annually	24-hr composite
Toxic Metals ²	001	1X / permit cycle	24-hr composite
Fecal coliform ³	001	2/year	grab
Total residual Chlorine ³	001	2/year	grab
pH ³	001	2/year	grab
DO ³	001	2/year	grab

Footnotes:

- 1 Internal Outfall 001a shall allow collection of WWTP effluent samples before its mixing and dilution with flow from Lake Connell.
- 2 Toxic metals are those identified as Compound Nos. 1 – 13 by the National Toxics Rule at 40 CFR 131.36. Metals concentrations shall be reported as total recoverable metal.
- 3 Monitoring once during the summer months between May and September and once during the winter months between December and March

Table 4 - Monitoring Requirements, Outfall 001a

Parameter	Sample Location ¹	Sample Frequency	Sample Type
Avg and Max Daily Flow	001a	continuous	metered
BOD ₅	WWTP Influent and 001a	monthly	24-hr composite
TSS	WWTP Influent and 001a	monthly	24-hr composite
pH	001a	weekly	grab
Fecal Coliform	001a	monthly	grab
Dissolved Oxygen	001a	monthly	grab
Chlorine Residual	001a	weekly	grab
Footnotes;			
Monitoring is done only if and when chlorine is used for disinfection.			

C. Analytical Methods

Monitoring must be conducted in accordance with test procedures required by/approved under 40 CFR 136, unless other test procedures are specified by this permit.

D. Additional Monitoring by Permittee

If the Permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR 136 or as specified by this permit, the Permittee must include results of that monitoring in the calculation and reporting of the data submitted in the monthly DMRs.

Upon a request by the Director, the Permittee must submit results of any other sampling and analysis, regardless of the test method used.

E. Whole Effluent Chronic Toxicity Monitoring

The Permittee must conduct chronic toxicity testing on effluent samples from Outfall 001 in accordance with the procedures, below.

1. Toxicity testing must be performed on 24 hour composite samples of effluent one time per year. Samples for chronic toxicity testing shall be collected at the same time as samples collected for the monthly analyses of that month.
2. Chronic Test Species and Methods
 - a. The Permittee must conduct the initial short term tests with four marine species; and after this screening procedure, subsequent toxicity testing shall be conducted using the mostly sensitive species.
 - b. The presence of chronic toxicity must be determined as specified in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to*

Marine and Estuarine Organisms, 2002, Third Edition, EPA-821-R-02-014, Office of Water, Washington, D.C.

- c. Results must be reported in TUc (chronic toxicity units), where $TUc = 100 / NOEC$. See Section V for a definition of NOEC.

3. Toxicity Triggers

Because effluent data does not support the establishment of a chronic toxicity limitation at this time, a target level for chronic toxicity of 1.0 TUc, which is the water quality standard applicable at the point of discharge, as described at 18 AAC 70.030, shall apply as the threshold level which triggers Sections II. E. 5 and 6, below.

4. Quality Assurance

- a. The toxicity testing on each organism must include a series of five test dilutions and a control using effluent dilutions of 100, 75, 50, 25, 12.5, and 0 percent (control).
- b. All quality assurance criteria and statistical analyses used for chronic toxicity tests and reference toxicant tests must be in accordance with *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms*, 2002, Third Edition, EPA-821-R-02-014, and individual test protocols.
- c. In addition to those quality assurance measures specified in the methodology, the following quality assurance procedures must be followed.
 - i. If organisms are not cultured in house, concurrent testing with reference toxicants must be conducted. If organisms are cultured in house, monthly reference toxicant testing is sufficient. Reference toxicant tests must be conducted using the same test conditions as the effluent toxicity tests.
 - ii. If either of the reference toxicant tests or the effluent tests do not meet all test acceptability criteria as specified in the test methods manual, the Permittee must re-sample and re-test within 14 days of receipt of the test results.
 - iii. Control and lab dilution water must be receiving water or lab water, as appropriate, as described in the manual. If the dilution water used is different from the culture water, a second control, using culture water, must also be used. Receiving water may be used as control and dilution water upon notification of EPA and ADEC. In no case shall water that has not met test acceptability criteria be used for either dilution or control.

5. Accelerated Testing

- a. If chronic toxicity is detected above the threshold level, as described at Section II. E. 3 of this permit, the Permittee must conduct four additional biweekly tests over an eight week period. This accelerated testing must be initiated within two weeks of receipt of the test results that indicate an exceedance.

- b. The Permittee must notify EPA and ADEC of the exceedance in writing within two weeks of receipt of test results. The notice must include the following information.
 - i. A status report on any actions required by the permit with a schedule for actions not yet completed.
 - ii. A description of any additional actions the Permittee has taken or will take to investigate and correct the cause(s) of the toxicity.
 - iii. Where no actions have been taken, a discussion of the reasons for not taking action.
 - c. If none of the four accelerated tests exceed the chronic toxicity threshold, the Permittee may return to the normal testing frequency. If any of the four tests exceed the threshold, then the toxicity reduction evaluation (TRE) requirements, below, in II. E. 6 shall apply.
- 6. Toxicity Reduction Evaluation (TRE) and Toxicity Identification Evaluation (TIE).
 - a. If the chronic toxicity threshold is exceeded during accelerated testing under Section II. E. 4, the Permittee must initiate a TRE in accordance with *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations*, (EPA/600/2-88/070) within two weeks of the exceedance. At a minimum, the TRE must include:
 - i. Further actions to investigate and identify the cause of toxicity;
 - ii. Actions the Permittee will take to mitigate the impact of the discharge and to prevent the recurrence of toxicity; and
 - iii. A schedule for these actions.
 - b. If a TRE is initiated prior to completion of the accelerated testing, the accelerated testing methods may be terminated, or used as necessary in performing the TRE.
 - c. The Permittee may initiate a TIE as part of the TRE process. A TIE must be performed in accordance with EPA guidance manuals, *Toxicity Identification Evaluation; Characterization of Chronically Toxic Effluents, Phase I* (EPA/600/6-91/005F), *Methods for Aquatic Toxicity Identification Evaluations, Phase II: Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/080), and *Methods for Aquatic Toxicity Identification Evaluations, Phase III: Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA-600/R-92/081).
- 7. Reporting
 - a. The Permittee must submit the results of any accelerated testing, under section II. E. 4, within two weeks of receipt of results from the lab. The full report must be submitted within 4 weeks of receipt of the results from the lab. If an initial investigation indicates the source of toxicity and accelerated testing is unnecessary,

the result of the investigation must be submitted with the DMR for the month following completion of the investigation.

- b. The report of toxicity test results must include all relevant test information described for report preparation in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms*, 2002, Third Edition, EPA-821-R-02-014, Office of Water, Washington, D.C.

F. Representative Sampling

Samples and measurements must be representative of the volume and nature of the monitored discharge.

In order to ensure that the effluent limits set forth in this permit are not violated at times other than when routine samples are taken, the Permittee must collect additional samples at the appropriate compliance location whenever any discharge occurs that may reasonably be expected to cause or contribute to a violation that is unlikely to be detected by a routine sample. The Permittee must analyze the additional samples for those parameters limited in Section I of this permit, as appropriate, that are likely to be affected by the discharge.

The Permittee must collect such additional samples as soon as the spill, discharge, or bypassed effluent reaches the compliance location. These samples must be analyzed and results must be reported in accordance with the monitoring and reporting provisions of this permit.

G. Quality Assurance Plan

The Permittee shall develop a Quality Assurance Plan (QAP) that provides written specification of quality control and assurance procedures for water quality monitoring required by this permit. The QAP shall be completed within 90 days of the effective date of this permit, and the Permittee shall notify EPA of completion of the QAP, also within 90 days of the effective date of this permit.

1. Purpose. The purpose of quality assurance and control requirements is to assure the integrity and quality of the data collected in the monitoring required by this permit and to assist in planning for the collection and analysis of water quality samples.
2. Requirements.
 - a. Throughout all sample collection and analytical activities, the Permittee shall use the EPA-approved quality assurance, quality control, and chain-of-custody procedures described in EPA QA/R-5 EPA (Requirements for Quality Assurance Project Plans) and EPA QA/G-5 (Guidance on Quality Assurance Project Plans). These guidance documents can be found on the Internet at <http://www.epa.gov/r10earth/offices/oea/qaindex.htm> and <http://www.epa.gov/r10earth/offices/oea/r0qahome.htm>.
 - b. At a minimum, the following information must be provided in the QAP:

- i. Sample locations (map and physical description, which includes station identification number, latitude, and longitude)
 - ii. Sampling frequency
 - iii. Sample handling, storage, transport, and chain-of-custody procedures
 - iv. Sample preparation and analytical methods, detection limits, and volume of sample required for each analyte.
 - v. Number of QC samples, spikes and replicates required for analysis
 - vi. Documentation requirements for the laboratory (i.e., retention or holding time, QA/QC procedures for test methods, volume of sample collected, field test blanks, etc.)
 - vii. Organizational responsibilities; i.e., who is responsible for QA/QC activities, and
 - viii. Names, addresses, and phone numbers of laboratories used or proposed for use by the Permittee.
- c. The Permittee is responsible for reviewing and updating the QAP to ensure all material is current and applicable.
 - d. The Permittee shall receive and hold all laboratory bench sheets used in the analyses and maintain these records for inspection by EPA or ADEC for a period of at least 5 years.
 - e. The Permittee must amend the QAP whenever there is a modification in sample collection, handling, or analytical methods, or conditions or requirements of the QAP.
 - f. Copies of the most current QAP must be kept on site and must be made available to the Director and ADEC upon request.
3. EPA Support of Quality Assurance and Control.

The Permittee may obtain copies of all references cited in this permit from the following address:

Quality and Data Management Program
Office of Environmental Assessment
U.S. EPA, Region 10, 1200 6th Avenue, OEA-095
Seattle, Washington 98101

H. Reporting of Monitoring Results

The Permittee must summarize monitoring results each month on a Discharge Monitoring Report (DMR) form (EPA No. 3320-1) or equivalent. The Permittee must submit reports on a monthly basis, postmarked on the 15th day of the following month.

The Permittee must sign and certify all DMRs, and all other reports, in accordance with the requirements of Section IV. W of this permit (Signatory Requirements). The Permittee must submit readable originals of these documents to the Director, Office of Water, with copies to ADEC at the following addresses:

U.S. EPA, Region 10
1200 Sixth Avenue, OW-133
Seattle, WA 98101

ADEC, Division of Air and Water Quality
610 University Avenue
Fairbanks, AK 99709

III. BEST MANAGEMENT PRACTICES PLAN

Within 90 days of the effective date of this permit, the Permittee shall develop and implement a Best Management Practices (BMP) Plan to prevent and/or minimize the generation and release of pollutants from the facility to waters of the United States through normal operations and ancillary activities. The Permittee shall notify EPA of completion of the BMP Plan, also within 90 days of the effective date of this permit

A. Purpose and Objectives

Through implementation of the BMP Plan requirements, the Permittee shall ensure that methods of pollution prevention, control, and treatment will be applied to all wastewaters to be discharged. The Permittee shall prevent or minimize the generation and discharge of wastes and pollutants from the facility to the waters of the United States through implementation of a BMP Plan. Pollution should be prevented or reduced at the source or recycled in an environmentally safe manner whenever feasible. Disposal of wastes into the environment should be conducted in such a way as to have a minimal environmental impact.

The Permittee shall develop its BMP Plan consistent with these objectives.

1. The number and quantity of pollutants and the toxicity of effluent generated, discharged, or potentially discharged at the facility shall be minimized by the Permittee to the extent feasible by managing each waste stream in the most appropriate manner.
2. Any Standard Operating Procedures (SOPs) shall ensure proper operation and maintenance of the facility and the control of the discharge or potential release of pollutants to the receiving waters.
3. The following evaluations shall be completed and considered in preparation of the BMP Plan.
 - a. Each facility component or system shall be examined for its pollutant minimization opportunities and its potential for causing a release of significant amounts of pollutants to receiving waters due to the equipment failure, improper operation, and

natural phenomena such as rain or snowfall. Systems include the WWTP, the composting facility, and the lake Connell diversion system.

- b. Equipment and systems shall be examined for potential failure and any resulting release of pollutants to receiving waters. The BMP Plan should address each such scenario resulting in the release of pollutants and include control and abatement steps to be implemented in such circumstances.

B. Requirements

1. The BMP plan shall be consistent with the general guidance contained in the publication entitled "Guidance Manual for Developing Best Management Practices," EPA (1993), or its subsequent revisions.
2. The BMP Plan will be developed in accordance with good engineering practices and will be recorded as a written plan and include necessary plot plans, drawings, or maps. The BMP Plan will be organized and written with the following structure:
 - a. Name, NPDES permit number and location of the facility;
 - b. Statement of BMP policy;
 - c. Materials accounting of the inputs, processes, and outputs of the facility (a.k.a., mass balance assessment);
 - d. Identification and assessment of potential effects of the pollutant discharges;
 - e. Specific management practices and standard operating procedures to achieve the above objectives, including, but not limited to,
 - i. the modification of equipment, facilities, technology, processes, and procedures, and
 - ii. the improvement in management, inventory control, materials handling, or general operational phases of the facility;
 - f. Good housekeeping;
 - g. Preventative maintenance;
 - h. Inspections and records; and
 - i. Employee training.

The BMP Plan will include the following provisions concerning its review:

- a. The facility manager and appropriate staff will review and approve the final Plan, and

- b. The Plan will include a statement that the above review has been completed and that the BMP Plan fulfills the requirements set forth in the permit. This statement shall be certified by the dated signature of the facility manager.

C. Documentation

The Permittee must maintain a copy of the BMP Plan at the facility and make it available to EPA, ADEC, or an authorized representative, upon request.

D. Modification of the BMP Plan.

The Permittee shall amend the BMP Plan whenever there is a change in the facility, its operations, or other circumstances which materially increase the generation of pollutants and their release or potential release to the receiving waters. The Permittee shall also amend the BMP Plan when facility operations covered by the BMP Plan change. Any such changes to the BMP Plan will be consistent with the objectives and specific requirements listed above. All changes in the BMP Plan shall be reviewed and approved by the facility manager.

If a BMP Plan proves to be ineffective in achieving the general objective of preventing and minimizing the generation of pollutants and their release and potential release to the receiving waters and/or the specific requirements above, the permit and/or the BMP Plan will be subject to modification to incorporate revised BMP requirements.

E. Certification and Signatory Requirements.

The Permittee shall submit to EPA written certification, signed by a principal officer or a duly appointed representative of the Permittee, of the existence and implementation of its BMP Plan within 30 days of the development of the BMP Plan. The Permittee shall maintain a copy of its BMP Plan at its facility and shall make the plan available to EPA and ADEC for review and approval upon request.

IV. COMPLIANCE RESPONSIBILITIES.

A. Duty to Comply

The Permittee shall comply with all conditions of this Permit. Any permit noncompliance constitutes a violation of the CWA and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The Permittee shall give reasonable advance notice to the Director and ADEC of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.

B. Proper Operation and Maintenance

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Permittee to achieve compliance with the conditions of this Permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar

systems only when the operation is necessary to achieve compliance with the conditions of this Permit.

C. Duty to Mitigate.

The Permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this Permit that has a reasonable likelihood of adversely affecting human health or the environment.

D. Toxic Pollutants

The Permittee must comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

E. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit.

F. Bypass of Wastewater Treatment

1. Bypass not exceeding limitations. The Permittee may allow any bypass to occur that does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 2 and 3 of this Part.

2. Notice

- a. Anticipated bypass. If the Permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass.
- b. Unanticipated bypass. The Permittee shall submit notice of an unanticipated bypass as required under Section IV. S of this permit.

3. Prohibition of Bypass.

- a. Bypass is prohibited, and EPA or ADEC may take enforcement action against the Permittee for a bypass, unless:
 - i. The bypass was unavoidable to prevent loss of life, personal injury or severe property damage;
 - ii. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment shall have been installed in the exercise of reasonable engineering

judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance; and

iii. The Permittee submitted notices as required under Section IV. F. 2 of this permit.

- b. EPA and ADEC may approve an anticipated bypass, after considering its adverse effects, if EPA and ADEC determine that it will meet the three conditions listed above in Section IV. F. 3. a of this permit.

G. Upset Conditions

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with technology-based effluent limitations, if the Permittee meets the requirements of paragraph 2, below. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
2. Conditions necessary for a demonstration of upset. To establish the affirmative defense of upset, the Permittee shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence, that:
 - a. An upset occurred and that the Permittee can identify the cause(s) of the upset;
 - b. The permitted facility was, at the time, being properly operated;
 - c. The Permittee submitted notice of the upset as required under Section IV. S of this permit.
 - d. The Permittee complied with any remedial measures required under Section IV. C of this permit (Duty to Mitigate).
3. Burden of proof. In any enforcement proceeding, the Permittee has the burden of proof in seeking to establish the occurrence of an upset.

H. Inspection and Entry

The Permittee shall allow EPA, ADEC, or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
3. Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this permit; and

4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance, or as otherwise authorized by the Act, any substances or parameters at any location.

I. Penalties for Violations of Permit Conditions.

1. Civil and Administrative Penalties. Any person who violates a permit provision implementing Section 301, 302, 306, 307, 308, 318 or 405 of the Act shall be subject to a civil or administrative penalty not to exceed the maximum amounts authorized by Sections 309(d and g) of the Act.
2. Criminal Penalties:
 - a. Negligent Violations. The Act provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than 2 years, or both.
 - b. Knowing Violations. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both.
 - c. Knowing Endangerment. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the Act, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions.
 - d. False Statements. The Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both. The Act further provides that any person who knowingly makes any false statement, representation,

or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

J. Duty to Provide Information

The Permittee shall furnish to EPA and ADEC, within the time specified in the request, any information that EPA or ADEC may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to EPA or ADEC, upon request, copies of records required to be kept by this permit.

K. Records Content

All effluent monitoring records shall bear the handwritten signature of the person who prepared them. In addition, all records of monitoring information shall include:

1. Date, exact place and time of sampling or measurements,
2. Names of the individual(s) who performed the sampling or measurements,
3. Date(s) analyses were performed,
4. Names of the individual(s) who performed the analyses,
5. Analytical techniques or methods used, and
6. Results of such analyses.

The Permittee shall submit its monthly Discharge Monitoring Report by the 20th of the month following the month of monitoring. The Permittee shall submit its annual report by February 14th of the year following each year of operation and discharge under this Permit. The Permittee shall submit its original reports to:

U.S. Environmental Protection Agency Region 10
NPDES Compliance Unit (OW-133)
1200 Sixth Avenue
Seattle, Washington 98101

and, a copy to:

Alaska Department of Environmental Conservation
Attention: Air and Water Quality Division
410 Willoughby, Suite 303
Juneau, Alaska 99801-1795

L. Submittal of Reports

The Permittee shall provide, within a reasonable time, any information that the EPA or ADEC requests to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit.

M. Retention of Records and Reports

The Permittee shall retain records of all monitoring information, including but not limited to, all calibration and maintenance records, copies of all reports required by this permit, a copy of this permit, and records of all data used to complete the application for this permit, for a period of at least five years from the date of the sample, measurement, report or application, or for the term of this permit, whichever is longer. This period may be extended by request of EPA or ADEC at any time.

N. On-Site Availability of Records and Reports

The Permittee shall allow the EPA or an authorized representative, upon presentation of credentials and other documents as may be required by law, at reasonable times, to have access to and copy any records that must be kept under the conditions of this permit.

O. Availability of Reports for Public Review

Except for data determined to be confidential under 40 CFR 2, all reports prepared in accordance with this permit shall be available for public inspection at the offices of the state water pollution control agency and EPA and ADEC. As required by the Act, permit applications, permits, and effluent data shall not be considered confidential.

P. Planned Changes

The Permittee shall give notice to EPA and ADEC as soon as possible of any planned physical alterations or additions to the permitted facility whenever:

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source as determined in 40 CFR 122.29(b); or
2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this permit.

The Permittee shall give notice to EPA and ADEC as soon as possible of any planned changes in processes or chemical use, whenever such change could significantly change the nature or increase the quantity of pollutants discharged.

Q. Changes in the Discharge of Toxic Substances

The Permittee must notify the Director and ADEC as soon as it knows, or has reason to believe:

1. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in the permit, if that discharge may reasonably be expected to exceed the highest of the following notification levels.
 - a. One hundred micrograms per liter (100 µg/L);
 - b. Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyly-4, 6 dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - c. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
 - d. The level established by the Director in accordance with 40 CFR 122.44(f).
2. That any activity has occurred or will occur that will result in any discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in the permit, if that discharge may reasonably be expected to exceed the highest of the following notification levels.
 - a. Five hundred micrograms per liter (500 µg/L);
 - b. One milligram per liter (1 mg/L) for antimony;
 - c. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
 - d. The level established by the Director in accordance with 40 CFR 122.44(f).

R. Anticipated Noncompliance.

The Permittee shall also give advance notice to EPA and ADEC of any planned changes in the permitted facility or activity that may result in noncompliance with this Permit.

S. Twenty Four Hour Notice of Non-Compliance - Reporting

1. The Permittee shall report the following occurrences of noncompliance to EPA by telephone (206-553-1846) and to ADEC (907-465-5300) within 24 hours from the time the Permittee becomes aware of the circumstances.
 - a. Any discharge(s) to the receiving waters not authorized for coverage under this Permit,
 - b. Any noncompliance that may endanger human health or the environment,
 - c. Any unanticipated bypass that results in or contributes to an exceedance of an effluent limitation in this Permit,

- d. Any upset that results in or contributes to an exceedence of an effluent limitation in this Permit, or
 - e. Any violation of a maximum daily discharge limitation of this Permit.
- 2. The Permittee shall provide a written submission within five days of the time that the Permittee becomes aware of any event required to be reported under Section IV. S. 1, above. The written submission shall contain:
 - a. a description of the noncompliance and its cause,
 - b. the period of noncompliance, including exact dates and times,
 - c. the estimated time noncompliance is expected to continue, if it has not been corrected, and
 - d. steps taken or planned to reduce, eliminate and prevent reoccurrence of the noncompliance.
- 3. EPA may, at its sole discretion, waive the written report on a case-by-case basis, if the oral report has been received within 24 hours by the NPDES Compliance Section in Seattle, Washington, by telephone, (206) 553-1846.
- 4. Reports shall be submitted to the addresses in Part II.H (Reporting of Monitoring Results) of this Permit.
 - a. The Permittee shall report all instances of noncompliance, not required to be reported within 24 hours, with the annual report.

T. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

U. Duty to Reapply

If the Permittee intends to continue an activity regulated by this Permit after the expiration date of this Permit, the Permittee must apply for and obtain a new permit. The application shall be submitted to EPA at least 60 days before the expiration date of this permit. Receipt of a timely Notice of Intent will administratively extend authorization to discharge until a new permit is reissued.

V. Incorrect Information and Omissions

When the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or that it submitted incorrect information in a permit application or any report to EPA or ADEC, it shall promptly submit the omitted facts or corrected information.

W. Signatory Requirements

All applications, reports or information submitted to EPA and ADEC shall be signed and certified.

1. All permit applications shall be signed as follows:
 - a. For a corporation: by a principal corporate officer.
 - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively.
 - c. For a municipality, state, tribe, federal or other public agency: by either a principal executive officer or ranking elected official.
2. All reports required by this permit and other information requested by EPA or ADEC shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described above and submitted to EPA and ADEC, and
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the Permittee. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)
3. Changes to authorization. If an authorization under subpart 2 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of subpart 2 must be submitted to EPA and ADEC prior to or together with any reports, information or applications to be signed by an authorized representative.
4. Certification. Any person signing a document under this Part shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

X. Property Rights

The issuance of this permit does not convey any property rights of any sort or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

Y. Severability

The provisions of this permit are severable. If any provision of this permit or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this permit, shall not be affected thereby.

Z. Transfers

This permit may be automatically transferred to a new permittee if:

1. The current Permittee notifies EPA at least 60 days in advance of the proposed transfer date;
2. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage and liability between them; and
3. EPA does not notify the existing Permittee and the proposed new Permittee of its intent to modify, or revoke and reissue the permit.

If the notice described in subpart 3 above is not received, the transfer is effective on the date specified in the agreement mentioned in subpart 2 above.

AA. Oil and Hazardous Substances Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities or penalties to which the Permittee is or may be subject under Section 311 of the Clean Water Act or under the Oil Pollution Act.

BB. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Act.

CC. Reopening of the Permit

1. This permit shall be modified or, alternatively, revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2) and 307(a)(2) of the Act, as amended, if the effluent standard, limitation or requirement so issued or approved:

- a. Contains different conditions or is otherwise more stringent than any condition in this Permit; or
 - b. Controls any pollutant or disposal method not addressed in this Permit.
2. This permit as modified or reissued under this paragraph shall also contain any other requirements of the Act then applicable.
3. This permit may be reopened to adjust any effluent limitations if future water quality studies, waste load allocation determinations, or changes in water quality standards show the need for different requirements.

VII. DEFINITIONS and ACRONYMS

AAC means Alaska Administrative Code.

Act means the Clean Water Act (CWA)

ADEC means Alaska Department of Environmental Conservation. ADFG means Alaska Department of Fish and Game.

Administrator means the Administrator of the EPA, or an authorized representative.

Average Monthly Discharge Limitation means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

BMP means best management practices – a schedule of activities, prohibitions, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage and leaks, sludge or waste disposal, or drainage from raw material storage areas.

Bypass means the intentional diversion of waste streams from any portion of a treatment facility. [See Part IV.G.]

CFR means the Code of Federal Regulations.

Chronic Toxicity Unit (TUC) is a measure of chronic toxicity. The number of chronic toxicity units in the effluent is calculated as 100/NOEC, where NOEC is measured in percent effluent.

Daily discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the *daily discharge* is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the *daily discharge* is calculated as the average measurement of the pollutant over the day.

Director means the EPA Director of the Office of Water, or an authorized representative.

DMR means Discharge Monitoring Report.

EPA means the United States Environmental Protection Agency.

Grab sample is an individual sample collected over a period of time not exceeding 15 minutes.

LC₅₀ means the concentration of toxicant that is lethal to 50 percent of the test organisms exposed in the time period prescribed by the test.

Maximum daily discharge limitation means the highest allowable daily discharge.

Method detection limit (MDL) means the minimum concentration of a substance (analyte) that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix containing the analyte.

Minimum level (ML) means the concentration at which the entire analytical system must give a recognizable signal and an acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method-specific sample weights, volumes, and processing steps have been followed.

MLLW means mean lower low water.

mg/L means milligrams per liter.

Mixing zone means the area adjacent to a discharge point where a receiving water may not meet all the water quality standards; wastes and water are given an area to mix so that the water quality standards are met at the mixing zone boundaries.

Monthly average means the average of *daily discharges* over a monitoring month, calculated as the sum of all *daily discharges* measured during a monitoring month divided by the number of *daily discharges* measured during that month.

NOEC means no observed effect concentration. The NOEC is the highest concentration of toxicant to which organisms are exposed in a chronic toxicity test that cause no observed adverse effects on the test organisms (i.e., the highest concentration of a toxicant in effluent where the values for the observed responses are not statistically different from the controls.)

QA/QC means quality assurance/quality control.

Regional Administrator means the Regional Administrator of Region 10 of the EPA, or the authorized representative of the Regional Administrator.

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.